

Title (en)
METHOD FOR PRODUCING HEAT-SHIELDING PLY STRUCTURE, HEAT-SHIELDING PLY STRUCTURE, AND TRANSPARENT LAMINATE FILM FOR PLY STRUCTURE

Title (de)
VERFAHREN ZUR HERSTELLUNG EINER HITZEABSCHIRMENDEN SCHICHTSTRUKTUR, HITZEABSCHIRMENDE SCHICHTSTRUKTUR UND TRANSPARENTER BESCHICHTUNGSFILM FÜR DIE SCHICHTSTRUKTUR

Title (fr)
PROCÉDÉ POUR LA PRODUCTION D'UNE STRUCTURE DE FEUILLE CALORIFUGE, STRUCTURE DE FEUILLE CALORIFUGE ET FILM STRATIFIÉ TRANSPARENT POUR STRUCTURE DE FEUILLE

Publication
EP 2535180 A4 20140319 (EN)

Application
EP 12747345 A 20120113

Priority
• JP 2011028322 A 20110214
• JP 2012050580 W 20120113

Abstract (en)
[origin: EP2535180A1] Disclosed is a method for producing a heat insulating laminate structure having an excellent solar radiation shielding capability as well as an excellent radio wave transparency. The method comprises placing a transparent laminate film 12 between two transparent substrates 14, 14, the transparent laminate film 12 having on at least one side of a transparent polymer film a laminated layer structure in which a metal oxide layer containing an organic component and a metal layer are laminated and grooves having widths of 30 μm or less are formed with dividing the metal layer; bonding the two substrates 14, 14 to each other through the transparent laminate film 12 under application of a pressure; and promoting division of the metal layer in the transparent laminate film 12 by the applied pressure to increase an overall surface resistance.

IPC 8 full level
C03C 27/12 (2006.01); **B32B 17/10** (2006.01); **G02B 5/28** (2006.01)

CPC (source: EP KR US)
B32B 3/10 (2013.01 - KR); **B32B 9/00** (2013.01 - KR); **B32B 15/08** (2013.01 - KR); **B32B 17/10036** (2013.01 - EP US); **B32B 17/10229** (2013.01 - EP US); **B32B 17/10761** (2013.01 - EP US); **C03C 27/10** (2013.01 - KR); **G02B 5/282** (2013.01 - EP US); **G02B 2207/109** (2013.01 - EP US); **Y10T 156/10** (2015.01 - EP US); **Y10T 156/1082** (2015.01 - EP US); **Y10T 428/24479** (2015.01 - EP US); **Y10T 428/24612** (2015.01 - EP US); **Y10T 428/31678** (2015.04 - EP US)

C-Set (source: EP US)
B32B 17/10005 + **B32B 2367/00**

Citation (search report)
• [E] EP 2472295 A1 20120704 - TOKAI RUBBER IND LTD [JP] & WO 2011024756 A1 20110303 - TOKAI RUBBER IND LTD [JP], et al
• [X] JP 2006327177 A 20061207 - TOKAI RUBBER IND LTD
• [A] JP 2005353656 A 20051222 - TOKAI RUBBER IND LTD
• [AP] EP 2371533 A1 201111005 - TOKAI RUBBER IND LTD [JP] & WO 2010074050 A1 20100701 - TOKAI RUBBER IND LTD [JP], et al
• [A] JP 2008105251 A 20080508 - TOKAI RUBBER IND LTD
• [A] JP 2008293129 A 20081204 - TOKAI RUBBER IND LTD
• [A] JP 2007331296 A 20071227 - TOKAI RUBBER IND LTD
• See references of WO 2012111367A1

Cited by
JP2017030348A; US2020369003A1; US2017314323A1; EP3243655A4; US10792894B2; WO2015032915A1; WO2019034308A1; US10455696B2; US10506710B1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
EP 2535180 A1 20121219; EP 2535180 A4 20140319; CN 102869498 A 20130109; CN 102869498 B 20140827; JP 2012166421 A 20120906; JP 5662824 B2 20150204; KR 101432414 B1 20140820; KR 20130004923 A 20130114; US 2013004727 A1 20130103; US 8545648 B2 20131001; WO 2012111367 A1 20120823

DOCDB simple family (application)
EP 12747345 A 20120113; CN 201280001264 A 20120113; JP 2011028322 A 20110214; JP 2012050580 W 20120113; KR 20127027856 A 20120113; US 201213598036 A 20120829